AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1(currently amended): A method of adjustment of the entrance dose of a radiology apparatus ~~of the type containing a~~ comprising means ~~of~~ for providing an X-ray beam emission, ~~a~~ means ~~of~~ for detection of the X-ray beam after it has crossed an object to be ~~visualized~~ imaged, a diaphragm for adjusting the gain of the apparatus, and ~~a~~ means ~~of visualization~~ for imaging connected to the means ~~of~~ for detection, in which the distance between the means ~~of~~ for emission and the means for detection is known from the geometry of the apparatus comprising: [,] ~~object is estimated and, when the distance between the means of emission and the object or the distance between the means of emission and the means of detection varies, the entrance dose is modified according to said distances in order to maintain an appreciably constant equivalent dose in the plane containing the object, the distance between the means of emission and the means of detection being known.~~

irradiating the object by the means for X-ray emission;

detecting the X-ray beam after it has passed the object using the means for detection of the X-ray beam;

estimating the distance between the means for emission and the object;

maintaining an appreciably constant equivalent entrance dose irradiating the object in a plane containing the object by acting on the supply parameters of the means for X-ray beam emission in accordance with the estimated distance; and

adjusting the gain of the radiology apparatus by the diaphragm;

whereby the entrance dose is changed by a factor SOD^2/SID^2, where SOD is the estimated distance and SID is the distance between the means for emission and the means for detection.

2 (currently amended): The method according to claim 1[,] in which the distance between the means ~~of~~ for emission and a detail of interest of the object is estimated.

3 (canceled).

4 (canceled).

5 (currently amended): The method according to claim 1 [,] in which the distance between the means ~~of~~ for emission and the object is estimated by approximation of the distance between the object and a table supporting the object, taking into account the object's morphology.

6 (currently amended): The method according to claim 2 [,] in which the distance between the means ~~of~~ for emission and the object is estimated by approximation of the distance between the object and a table supporting the object, taking into account the object's morphology.

7 (canceled).

8 (canceled).

9 (currently amended): The method according to claim 1 [,] in which the distance between the means ~~of~~ for emission and the object is estimated by considering the object to be placed roughly on an axis of rotation of the radiology apparatus, which axis permits taking of images at different angles in relation to an isocenter.

10 (currently amended): The method according to claim 2 [,] in which the distance between the means ~~of~~ for emission and the object is estimated by considering the object to be placed roughly on an axis of rotation of the radiology apparatus, which axis permits taking of images at different angles in relation to an isocenter.

11 (canceled).

12 (currently amended): The method according to claim 1 [,] in which the ~~radiology apparatus including a~~ the diaphragm is situated on ~~an optical~~ a radiation path ~~and making it possible~~ to adjust the attenuation of the quantity of ~~light~~ radiation crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

13 (currently amended): The method according to claim 2 ~~1,~~ in which the ~~radiology apparatus including a~~ the diaphragm is situated on ~~an optical~~ a radiation path ~~and making it possible~~ to adjust the attenuation of the quantity of ~~light~~ radiation crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

14 (cancèled).

15 (canceled).

16 (currently amended): The method according to claim 5 [,] in which the ~~radiology apparatus including a~~ the diaphragm situated on ~~an optical~~ a radiation path ~~and making it possible~~ to adjust the attenuation of the quantity of ~~light~~ radiation crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

17 (currently amended): The method according to claim 6 [,] in which the ~~radiology apparatus including a~~ the diaphragm is situated on ~~an optical~~ a radiation path ~~and making it possible~~ to adjust the attenuation of the quantity of ~~light~~ radiation crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

18 (canceled).

19 (canceled).

20 (currently amended): The method according to claim 9 [,] in which the ~~radiology apparatus including a~~ the diaphragm is situated on ~~an optical~~ a radiation path ~~and~~

~~making it possible~~ to adjust the attenuation of the quantity of ~~light~~ radiation crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

21 (currently amended): The method according to claim 10 [,] in which the radiology ~~apparatus including a~~ diaphragm is situated on ~~an optical~~ a radiation path ~~and making it possible~~ to adjust the attenuation of the quantity of ~~light~~ radiation crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

22 (canceled).

23 (currently amended): The method according to claim 1 [,] in which knowing the real size of the object or of a material introduced in the object ~~for medical needs~~, an image processing is carried out to recognize ~~said~~ the object in the different images, the size of ~~said~~ the object in the different images or the material introduced in the different images as a result of geometrical modification of the radiology apparatus is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

24 (currently amended): The method according to claim 2 [,] in which knowing the real size of the object or of a material introduced in the object ~~for medical needs~~, an image processing is carried out to recognize ~~said~~ the object in the different images, the size of ~~said~~ the object in the different images or the material introduced in the different images as a result of geometrical modification of the radiology apparatus is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

25 (canceled).

26 (canceled).

27 (currently amended): The method according to claim 5 [,] in which knowing the real size of the object or of a material introduced in the object ~~for medical needs~~, an image processing is carried out to recognize ~~said~~ the object in the different images, the size of ~~said~~ the object in the different images or the material introduced in the different images as a result of geometrical modification of the radiology apparatus is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

28 (currently amended): The method according to claim 6 [,] in which knowing the real size of the object or of a material introduced in the object ~~for medical needs~~, an image processing is carried out to recognize ~~said~~ the object in the different images, the size of ~~said~~ the object in the different images or the material introduced in the different images as a result of geometrical modification of the radiology apparatus is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

29 (cancelēd).

30 (canceled).

31(currently amended): The method according to claim 9 [,] in which knowing the real size of the object or of a material introduced in the object ~~for medical needs~~, an image processing is carried out to recognize ~~said~~ the object in the different images, the size of ~~said~~ the object in the different images or the material introduced in the different images as a result of geometrical modification of the radiology apparatus is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

32 (currently amended): The method according to claim 10 [,] in which knowing the real size of the object or of a material introduced in the object ~~for medical needs~~, an image processing is carried out to recognize ~~said~~ the object in the different images, the size of ~~said~~ the object in the different images or the material introduced in the different images as a result of geometrical modification of the radiology apparatus is measured and

the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

33 (canceled).

34 (currently amended): The method according to claim 12 [,] in which knowing the real size of the object or of a material introduced in the object ~~for medical needs~~, an image processing is carried out to recognize ~~said~~ the object in the different images, the size of ~~said~~ the object in the different images or the material introduced in the different images as a result of geometrical modification of the radiology apparatus is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

35 (currently amended): Radiology apparatus comprising:

means for emission of an X-ray beam;

means ~~of~~ for detection of the X-ray beam after it has crossed an object to be ~~visualized~~ imaged;

means for ~~visualization~~ imaging connected to the means ~~of~~ for detection;

a diaphragm for adjusting the gain of the apparatus;

wherein a first distance between the means for emission and the object is estimated;

wherein a second distance between the means for emission and the means for detection is known;

wherein when a third distance between the means for emission and the object or a fourth distance between the means for emission and the means for detection varies;

means for modifying an entrance dose of the X-ray beam to the means for detection ~~is modified~~ by acting on the supply parameters of the means for X-ray emission in accordance with the estimated distance; and

the diaphragm causing the adjustment of the entrance dose ~~of the means for detection is~~ to be changed by a factor according to the ~~third or fourth distance and to maintain an appreciably constant equivalent dose in a plane containing the object to the~~ ratio of the square of the distance between the means for emission and the object and to the square of the distance between the means for emission and the means for detection.

36 (new): The apparatus according to claim 35 in which the diaphragm is situated on a radiation path to adjust the attenuation of the quantity of radiation crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

37 (new): A method of adjustment of the entrance dose of a radiology apparatus comprising means for providing an X-ray beam emission, means for detection of the X-ray beam after it has crossed an object to be imaged, means for adjusting the gain of the apparatus, and means for imaging connected to the means for detection, in which the distance between the means for emission and the means for detection is known from the geometry of the apparatus comprising:

irradiating the object by the means for X-ray emission;

detecting the X-ray beam after it has passed the object using the means for detection of the X-ray beam;

estimating the distance between the means for emission and the object;

maintaining an appreciably constant equivalent entrance dose irradiating the object in a plane containing the object by acting on the supply parameters of the means for X-ray beam emission in accordance with the estimated distance; and

adjusting the gain of the radiology apparatus by the means for adjusting;

whereby the entrance dose is changed by a factor SOD^2/SID^2, where SOD is the estimated distance and SID is the distance between the means for emission and the means for detection.

38 (new): Radiology apparatus comprising:

means for emission of an X-ray beam;

means for detection of the X-ray beam after it has crossed an object to be imaged;

means for imaging connected to the means for detection;

means for adjusting the gain of the apparatus;

wherein a first distance between the means for emission and the object is estimated;

wherein a second distance between the means for emission and the means for detection is known;

wherein when a third distance between the means for emission and the object or a fourth distance between the means for emission and the means for detection varies;

means for modifying an entrance dose of the X-ray beam to the means for detection by acting on the supply parameters of the means for X-ray emission in accordance with the estimated distance; and

the means for adjustment causing the entrance dose to be changed by a factor according to the ratio of the square of the distance between the means for emission and the object and to the square of the distance between the means for emission and the means for detection.